Solution

Process safety solutions

Value proposition

Solution in brief
In order to protect your people and the environment, to ensure that your process is safer and more efficient, and to meet safety best practice as defined in the IEC 61511 standard, we offer a solution for your safety system requirements based on a worldwide recognized offer and proven technology. PlantStruxure delivers the flexibility to combine both safety and process applications in the one system.

Value proposition

Ensure maximum safety
- The Modicon Quantum safety system is SIL3-certified by TÜV Rheinland and is conform to IEC61508, ensuring your application meets IEC61511 safety standards.
- It provides an optimum solution that ensures the safety of critical industrial processes, especially in sectors such as Oil & Gas, petrochemicals, energy, and critical infrastructures.

Ensure maximum system availability
- The Quantum safety system can also be integrated within a Quantum Hot Standby redundant system architecture. Hot Standby technology combined with safety for a totally integrated, safe redundant architecture that includes processors, power supplies, I/O, remote I/O, SCADA, HMI and cabling systems.

Optimize operations
The common hardware, communication and software simplifies maintenance and minimizes training, and Quantum Hot Standby offers the ability to repair any fault without interrupting the process.

Reduce asset cost and protect your investment
- You capitalize on your existing experience when introducing safety functionality into an existing system.
- You benefit by keeping your normal maintenance and operation practices, as well as your installed PLC equipment.

Benefits
Reliable ★★★★★
MTTF up to 2,000 years when implemented a hot-standby solution
Safe ★★★★★
SIL3

Solution breakdown
Main products & systems:
- Process control PLC: Modicon Quantum
Main characteristics

- IEC61508 safety certified PLC by TÜV Rheinland Group
- Applicable up to SIL3
- 1oo2 Hot Repair fault tolerant system
- Scalable common SIS (Safety Instrumentation System) and BPCS (Basic Process Control System) PLC platform
- Safety expertise services to support end users:
  - HAZOP (Hazard and Risk Analysis)
  - Design of safety functions
  - Execution capabilities
- Migration tools and services.